Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Broadcast Incentive Auction Comment Public Notice Auction 1000, 1001 and 1002	))	AU Docket No. 14-252
	)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions	)))	GN Docket No. 12-268

REPLY COMMENTS OF
LOCUSPOINT NETWORKS, LLC

As television broadcasters across the country assess the unique financial opportunity presented by the upcoming historic broadcast incentive auction and weigh their options for participating, the Commission must advance quickly to resolve the many issues raised in the above-captioned Public Notice.[1] LocusPoint Networks, LLC ("LPN")[2] will focus these reply comments on a few key issues that, according to the comments filed in this proceeding, have emerged as the most important to ensuring sufficient participation by broadcasters, which is the *sine qua non* of a successful incentive auction: (1) whether the methodology for determining opening price offers will ensure that a sufficient number of television stations have the incentive to participate in the reverse auction; (2) how much "impairment" of post-auction spectrum should be allowed in the post-auction 600 MHz Band; and (3) when should the incentive auction take place.

[1] *Comment Sought on Competitive Bidding Procedures for Broadcast Incentive Auction 1000, Including Auctions 1001 and 1002*, AU Docket No. 14-252 & GN Docket No. 12-268, *Public Notice*, 29 FCC Rcd 15750 (rel. Dec. 17, 2014) ("*Comment PN*").

[2] LPN is the controlling interest holder in 11 UHF television stations, including stations in the New York, Chicago, Philadelphia, San Francisco, Miami, Detroit, Baltimore, Orlando, Buffalo, and Milwaukee Designated Market Areas. LPN is a founding member of the Expanding Opportunities for Broadcasters Coalition ("EOBC") and an associate member of the Association of Public Television Stations, and is actively pursuing discussions with commercial and non-commercial television licensees to encourage their participation in the incentive auction, including through channel sharing arrangements.

I. The Commission Should Revise the Opening Bid Pricing Methodology To Better Reflect A Station's Impact on Repacking

When the Commission adopted the framework for the incentive auction, it determined that reverse auction prices should take into account "objective factors … that affect the availability of channels in the repacking process" and stated its intention to set prices to reflect the "impact on the repacking process" that stations would have.[3] Put another way, the Commission established the policy that "a station with a high potential for interference will be offered a price that is higher than a station with less potential for interference to other stations."[4]

The *Comment PN*, however, breaks faith with this policy by proposing to determine opening price offers in the reverse auction through use of a "station volume" formula that gives equal weight to (1) the interference constraints that a station would place on the repacking process, and (2) the population covered by that station. As proposed, a station's opening price offer would be calculated by multiplying the base clock price (proposed at 900) by the station's "volume," determined by the following equation:

$$\textit{Station Volume} = (\textit{Interference})^{0.5} * (\textit{Population})^{0.5}$$

The *Comment PN* does not explain how the proposed station volume formula reflects a station's "impact on the repacking process," as required by the *Incentive Auction R&O*. Indeed, as explained by EOBC in it comments, the proposed formula will do the opposite, resulting in higher clearing prices for stations with a smaller impact on the repacking process.[5] The proposed formula, therefore, clearly has to be modified to de-emphasize the population factor in it.

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[3] *See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, GN Docket No. 12-268, *Report and Order*, 29 FCC Rcd 6567, 6753-6754 ¶¶ 450-451 (2014) ("*Incentive Auction R&O*").

[4] *Id.*, ¶ 450. The Commission has developed data on the interference constraints on the repacking process imposed by each of the 2,173 auction-eligible full power and Class A television stations.

[5] *See* Comments of EOBC, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 19, 2015), at 20 & Exhibit D ("EOBC Comments").

The overwhelming weigh of the comments submitted in response to the *Comment PN* opposes the *Comment PN*'s proposed station volume formula because of its fundamental flaws.[6] EOBC has proposed a simple and easy to implement alternative to the *Comment PN*'s proposed station volume formula. The EOBC proposal retains the basic structure and components of the *Comment PN*'s proposed formula (*i.e.*, it retains a population factor), but is more faithful to the *Incentive Auction R&O*'s policy that stations with greater preclusive effect on the repacking should receive higher prices. With one simple tweak, the EOBC-proposed station volume formula reduces by half the weight afforded to the population factor:

$$Station\ Volume = (Interference)^{0.5} * (Population)^{0.25}$$

This revised formula produces higher opening price offers for virtually all auction-eligible stations.[7] The Commission should embrace EOBC's proposal because it will provide a more compelling incentive for broadcasters to participate in the reverse auction, because it produces opening price offers that are more faithful to the Commission's pricing policy – i.e., to pay more to stations whose impact on the repacking process is greater, and because it will better promote the overriding goal of the incentive auction – to reallocate as much television spectrum

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[6] *See*, *e.g.*, Comments of AT&T Services Inc., AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 39-43 ("AT&T Comments"); Comments of Trinity Broadcasting Network, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 2-3; Comments of Milachi Media LLC, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 2-4; Comments of Local Media TV Holdings LLC, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 7; EOBC Comments at 11-23 & Exhibit D. Among the few parties in this proceeding to endorse the *Comment PN*'s proposed station volume formula is WRNN Associates, whose support is premised on the notion that population, as "one of the most, if not *the* most, important elements by which we and other broadcasters value our properties, and distinguish our stations from others … is critical for the repacking process because participation of many stations with high population counts, especially in the major cities, is essential to meet larger clearing targets." Ex Parte Notice filed by WRNN-TV Associates, Limited Partnership, GN Docket No. 12-268 & AU Docket No. 14-252 (Feb. 5, 2015) at 2. This rationale should be disregarded as it flies squarely in the face of the Commission's determination in the Incentive Auction R&O not to consider a station's market or enterprise value in setting reverse auction prices. *See Incentive Auction R&O*, ¶ 450.

[7] Using data made publicly available by the Commission, EOBC compared the opening price offers that would result from the *Comment PN*'s proposed station volume formula with those derived from EOBC's proposed revised formula. Opening price offers were higher for 2,165 out of 2,173 auction-eligible stations. EOBC has posted a spreadsheet with its calculations on its website (*see* https://broadcastcoalition.files.wordpress.com/2015/03/fcc-scoring-formula-vs-eobc-scoring-formula1.xlsx).

as possible for mobile broadband use.[8]

The simple fact of the matter is that, by increasing opening price offers for virtually all television stations, Commission use of the revised station volume formula will increase broadcaster participation, which in turn increases the prospects for a successful incentive auction. Furthermore, the record compiled in response to the *Comment PN* affords the Commission no justification to reject EOBC's proposed revision to the formula. Any concern with increasing opening price offers should be allayed by the greater competition for clearing payments that greater broadcaster participation would bring, and should be outweighed by the economic and public interest benefits to be derived from reallocating the maximum amount of spectrum for mobile broadband use.

Adherence to the station volume formula as proposed in the *Comment PN* would run counter to the Commission's policy to link pricing to repacking impact, and would reduce the prospects for a successful incentive auction by dampening the incentive for television stations to participate. EOBC has presented a compelling "fact-based, data-driven" analysis of this issue, leading to a proposed revision to the station volume formula that retains the basic structure of the opening price methodology but appropriately de-emphasizes the population factor. The Commission should adopt the EOBC proposal.

II. The Commission Should Seek to Limit Impairment and Should Focus Primarily on Limiting Impairment in the Nation's Largest Markets

The record reflects widespread concern among both broadcaster and wireless providers

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[8] *See* EOBC Comments at 24-26 & Exhibit B (Expert Report by Peter Cramton, *et al*.); Reply Comments of EOBC, AU Docket No. 14-252 & GN Docket No. 12-268 (Mar. 12, 2015) at 4-7 & Att. at 35-39 (Peter Cramton, Hector Lopez, David Malec, and Pacharasut Sujarittanonta, *Design of the Reverse Auction in the FCC Incentive Auction* (Mar. 12, 2015) ("Cramton Expert Report II")). The analysis demonstrates that simply increasing the base clock level, while useful, does not address the underlying problem with the proposed scoring rule's relative weighting of population and interference constraints. Increased broadcaster participation will occur with the EOBC's corrected weighting formula. Cramton Expert Report II at 35.

about the Commission's proposed optimization procedure, which is likely to result in excessive and unnecessary impairment of repurposed spectrum. Television stations remaining in business after the auction fear that being assigned a channel in the new 600 MHz band would subject them to interference,[9] while wireless providers predict that a high degree of impairment will suppress forward auction revenue, needlessly complicate the two-step forward auction process, and/or impair their ability to make the most efficient and effective use of the new mobile broadband licenses.[10] The Commission's proposal to cap impairment at 20 percent of weighted pops nationwide threatens to create a situation in which a major market – where new mobile broadband licenses otherwise would be highly valued – would be highly impaired, severely devaluing those licenses. Commenters have offered several solutions to address this concern, but they have in common a general concurrence on the need to minimize impairments generally. Some urge the Commission to concentrate on avoiding impairments, especially in the largest markets.[11]

EOBC has offered an alternative optimization proposal that provides the Commission a simple, straightforward path to achieve its incentive auction goals. Under this proposal, a near-national clearing target would be set on the basis of the maximum amount of spectrum that could be reallocated to mobile broadband use in either the New York or Los Angeles partial economic

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[9] Comments of the National Association of Broadcasters, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 11-12 ("NAB Comments"); Comments of Sinclair Broadcast Group, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 1-2; Joint Comments of the Association of Public Television Stations, the Public Broadcasting Service, and the Corporation for Public Broadcasting, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 3 ("APTS/PBS/CPB Comments").

[10] AT&T Comments at 4-5, 11; Comments of Verizon, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 4-5 ("Verizon Comments"); Comments of Sprint Corporation, AU Docket No. 14-252 & GN Docket No. 12-268 at 12-15 ("Sprint Comments"); Comments of T-Mobile USA, Inc. at 16-18 ("T-Mobile Comments").

[11] Comments of CTIA – The Wireless Association®, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) ("CTIA Comments") at 6-10; AT&T Comments at 11, 24-28.

area, whichever is greater, after optimization.[12] It is just common sense to look first at those two markets; they plainly will have a ripple effect on clearing their respective seaboards and, in turn, will have an impact on spectrum value nationwide.[13]

The EOBC proposal has the advantage of prioritizing unimpaired spectrum.[14] The record leaves no doubt that truly clear frequencies are critical to the successful provision of new wireless services in the nation's most densely populated areas.[15] In certain limited areas, such as along sections of the border, some impairment may have to be tolerated. But not all impairments are equal – and the Commission should strive to avoid *unnecessary* impairments by reallocating as much unimpaired spectrum as possible to the largest markets, which are home to many millions of consumers.

Retooling the optimization procedure to incorporate the EOBC proposal will achieve all of these goals. In addition, it would be simple to implement and simple for auction participants to understand, thereby enhancing the transparency and predictability of the overall process.

III. The Commission Should Increase the Discount Applied to Bids to Move from UHF to VHF

In its comments, LPN suggested that the proposed discounts associated with UHF-to-VHF bids were not high enough. Others have taken the opposite view, i.e., that UHF-to-VHF bids should be subject to little or no discount off of Go Off-Air bids.[16] Their arguments should be rejected because they ignore the basic fact that there is no guarantee that a UHF-to-VHF bid

[12] EOBC Comments at 29-30

[13] EOBC Comments at 30; *see also* AT&T Comments at 4-5, 13, 22; CTIA Comments at 7-8; Sprint Comments at 28-29.

[14] *See* EOBC Comments at 29-32; EOBC Reply Comments (Mar. 12, 2015) at 9-10, 13.

[15] *See*, *e.g.*, Comments of the Competitive Carriers Association, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 12 ("CCA Comments"); *see also* NAB Comments at 10-11.

[16] *See* APTS/PBS/CPB Comments at 8-9; Comments of Broadcasters for VHF Pricing Parity, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015) at 3-10.

will be successful. If the UHF-to-VHF discount is not high enough, the following scenario could play out:

- A UHF station switches from a Go Off-Air bid to a Move-to-High-VHF or Move-to-Low-VHF bid because the price discount is not too severe and is outweighed (in the station's view) by the prospect of retaining a 6 MHz channel. At the time of that switch, enough VHF stations have active bids to enable the Commission to accommodate the UHF station in the VHF band.

- As prices are reduced round-by-round, prices offered to the VHF stations drop so low that those station drop out of the auction, meaning they must be repacked in the VHF band. This in turn means that the Commission can no longer accept the UHF station's Move-to-VHF bid and it has to be repacked in the UHF band.[17]

The Commission's central goal in the reverse auction should be to provide sufficient incentive to broadcasters to clear spectrum in the UHF band. Presenting UHF stations with attractive Move-to-VHF options discourages them from doing the work to enter into channel sharing arrangement, which offer much greater assurance to the Commission that a station will actually relinquish their spectrum. Moreover, the auction process may make it impossible for the Commission to accept a Move-to-VHF bid, so offering relatively attractive prices for Move-to-VHF bids could well hinder the Commission's spectrum clearing goal. The Commission would be wise to instead deepen the discount for Move-to-VHF bids so that UHF stations who want to retain the possibility of continuing over-the-air transmissions post-auction will move in the direction of channel sharing.

The Commission therefore should determine that opening prices for stations choosing to move from UHF or High-VHF to Low-VHF should be at most 50 percent of Go Off-Air prices, and that opening prices for stations choosing to move from UHF to High-VHF should be at most 25 percent of Go Off-Air prices. Without these deeper discounts, the Commission places in peril

[17] As noted in its comments, LPN agrees with the Commission that allowing a station that has switched from a Go Off-Air bid to switch back would be administratively unworkable.

its goal of clearing the maximum amount of spectrum in the incentive auction.

IV. The Commission Should Adhere To Its Early 2016 Time Frame for Conducting the Incentive Auction

The Commission now has in hand all the input it needs to make the key auction design decisions. It therefore should move briskly to adopt auction procedures, conclude other rulemakings necessary to the incentive auction, and launch the auction itself. When it began the process of adopting rules for the broadcast incentive auction nearly two-and-a half years ago, the Commission "anticipate[d] that we will be able to conduct the auction in 2014."[18] Since that time, the auction has been delayed twice, first to mid-2015 and then to early 2016.

The robust record compiled in response to the *Comment PN* raises no issues that would justify a further delay. Indeed, the record shows that any additional delay in the incentive auction would do damage to the American economy by depriving consumers of the benefits of enhanced mobile broadband services. Those benefits are not theoretical. The analysis prepared by The Brattle Group, which LPN submitted with its initial comments, demonstrated that both the economic and societal benefits of the repurposed spectrum will be substantial. Additional delay "will defer deployments into the future, resulting in lost revenue and consumer welfare [that] quickly add[s] up and **could easily approach $200 billion**."[19] The *Brattle Group Report* showed that "[m]obile broadband, and the spectrum that enables it, creates jobs, motivates capital investment, spurs innovation in existing industries and is the catalyst for entirely new industries," and that the consumer welfare benefits are at least 10 times greater, and perhaps as

[18] *See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Docket No. 12-268, *Notice of Proposed Rulemaking*, 27 FCC Rcd 12357, 12362 ¶ 10 (2002).

[19] LPN Comments, Attachment 1 – The Brattle Group, *On Track: Benefits from the Incentive Auction* (Feb. 20, 2015) ("*Brattle Group Report*"), at 5 (emphasis added). This figure is based on an annual cost of delay in excess of $60 billion, and The Brattle Group's *Report* estimation that, if there is any delay, "it is likely to stretch out for 2 to 3 years as it is likely a new FCC Chairman after the 2016 election will want to reevaluate the choices the previous FCC made." *Id*.

much as 20 times larger, than the direct economic value of the spectrum.[20] Extending the period of uncertainty regarding the incentive auction will disserve consumers (and taxpayers), and serve no sector of the communications industry, including broadcasting, well.

Furthermore, the record before the Commission in this proceeding – and in many other settings – makes plain that the reallocation of low-band spectrum is critical to the growth, competitiveness, and success of our nation's mobile broadband marketplace. Arguing against any further delay, the Competitive Carriers Association recently stated that "demand for wireless broadband services is exploding and that the spectrum needs of carriers and consumers are not being fully met" and that "low-band spectrum in particular is a competitive necessity in the wireless market …."[21] This is especially true for rural wireless carriers, who require the superior propagation characteristics of low-band spectrum to cover large areas and "ensure that consumers in the most rural areas can have access to the most up-to-date fixed and mobile wireless broadband applications."[22]

Finally, by making it clear that it intends to stick to the current schedule for the incentive auction, the Commission will send a strong signal to broadcasters who are uncertain whether and how to participate – the so-called "fence-sitters." Stations entering channel sharing arrangements can significantly contribute to this auction's success, but significant advance time is required to do the necessary engineering and legal work. Broadcasters anticipating a further delay in the incentive auction may delay these planning efforts. The Commission therefore

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[20] *Id*.

[21] *Ex Parte* Letter of Competitive Carriers Association, GN Docket No. 12-268, WT Docket No. 12-269, ET Docket No. 14-14 & AU Docket No. 14-252 (Feb. 5, 2015) at 1 (CCA *Ex Parte* Letter"); *see also e.g.*, CCA Comments at 11-12, 9; Sprint Comments at 4, 6, 10, 27; T-Mobile Comments at 2-3, 5, 21, 34.

[22] *See* Comments of Rural Wireless Association, Inc. and NTCA – The Rural Broadband Association (Feb. 20, 2015) ("RWA/NTCA Comments"), at 6 ("Small and rural wireless providers represented by the Associations are preparing for an early 2016 auction and any delay will substantially and negatively impact business plans and opportunities.").

should squelch the notion of any further delay.

There is near universal agreement in the record – among broadcasters and wireless carriers alike – that the Commission should adhere to the current schedule to accept applications for the incentive auction in late 2015 and begin the bidding in early 2016.[23] To be sure, the Commission still has important matters to resolve, but the data it needs to make those decisions is now before it. The Commission is poised to unleash enormous economic benefits for the American economy through the incentive auction. It should do all it can to ensure that the incentive auction remains on its current schedule.

V. Conclusion

LPN respectfully urges the Commission to act expeditiously to keep the broadcast incentive auction on track for early 2016, and to adopt auction procedures along the lines suggested herein.

Respectfully submitted,

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[23] *See*, *e.g.*, EOBC Comments at 9-11; RWA/NTCA Comments at 6-7; Sprint Comments at 8; T-Mobile Comments at 2; CCA *Ex Parte* Letter at 1. The sole proponent for further delay (an individual commenter named Morgan Wick) argues that the Commission should not conduct the incentive auction until it has completed the 2014 broadcast ownership review. *See* Comments of Morgan Wick, AU Docket No. 14-252 & GN Docket No. 12-268 (Feb. 20, 2015), at 1. No broadcaster, however, has expressed the view that the incentive auction should await resolution of the ownership review.